

What is claimed is:

1. A contoured panel for directing a flow of air within an electronic device,

comprising:

a panel configured to be removably placed proximate to an electronic device, the electronic device having a heat producing element and a fan, the panel further having a contoured portion configured to be placed proximate to the fan so as to direct a flow of air from the fan across the heat producing element, the flow of air facilitating the cooling of the heat producing element.

2. The contoured panel of claim 1 wherein the electronic device further comprises a sensor configured to determine whether the panel is placed proximate to the electronic device.

3. The contoured panel of claim 2 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the panel is placed proximate to the electronic device, and wherein the panel further comprises a reflective tab configured to reflect the beam of light back to the optical sensor when the panel is placed proximate to the electronic device.

4. The contoured panel of claim 2 wherein the heat producing element is a microprocessor configured to transmit a warning message to a user of the electronic device upon a determination by the sensor that the panel is not placed proximate to the electronic device.

5. The contoured panel of claim 2 wherein the heat producing element is a microprocessor configured to shut down upon a determination by the sensor that the panel is not placed proximate to the electronic device.
6. The contoured panel of claim 2 wherein the heat producing element is a microprocessor configurable in a first mode so as to consume a first amount of electrical power and a second mode so as to consume a second amount of electrical power, the first amount greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the panel is not placed proximate to the electronic device.
7. The contoured panel of claim 2 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the panel is not placed proximate to the electronic device.
8. The contoured panel of claim 1, the electronic device having a first heat producing element and a second heat producing element, and first and second fans, the panel further having first and second contoured portions, the first contoured portion configured to direct a first flow of air from the first fan across the first heat producing element, and the second contoured portion configured to direct a second flow of air from the second fan across the second heat producing element.

9. The contoured panel of claim 1 wherein the panel is transparent.

10. An air-cooled electronic device, comprising:

a housing;

a microprocessor and a fan within the housing; and

a panel configured to be removably placed proximate to the housing, the panel having a contoured portion configured to direct a flow of air from the fan across the microprocessor so as to cool the microprocessor.

11. The air-cooled electronic device of claim 10 further comprising a sensor configured to determine whether the panel is placed proximate to the housing.

12. The air-cooled electronic device of claim 11 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the panel is placed proximate to the housing, and wherein the panel further comprises a reflective tab configured to reflect the beam of light back to the optical sensor.

13. The air-cooled electronic device of claim 11 wherein the microprocessor is configured to transmit a warning message to a user of the electronic device upon a determination by the sensor that the panel is not placed proximate to the housing.

14. The air-cooled electronic device of claim 11 wherein the microprocessor is configured to shut down upon a determination by the sensor that the panel is not placed proximate to the housing.

15. The air-cooled electronic device of claim 11 wherein the microprocessor is configurable in a first mode so as to consume a first amount of electrical power and a second mode so as to consume a second amount of electrical power, the first amount greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the panel is not placed proximate to the housing.

16. The air-cooled electronic device of claim 11 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the panel is not placed proximate to the housing.

17. The air-cooled electronic device of claim 10, the electronic device having a first microprocessor and a second microprocessor, and first and second fans, the panel further having first and second contoured portions, the first contoured portion configured to direct a first flow of air from the first fan across the first microprocessor, and the second contoured portion configured to direct a second flow of air from the second fan across the second microprocessor.

18. The air-cooled electronic device of claim 10 wherein the panel is transparent.

19. An electronic device housing, comprising:

a first portion configured to support a microprocessor;

a second portion configured to support a first fan;

a removable, contoured portion configured to direct air from the first fan across the microprocessor, so as to cool the microprocessor.

20. The electronic device housing of claim 19 further comprising a third portion configured to support a peripheral card and a fourth portion configured to support a second fan, wherein the contoured portion is further configured to direct air from the second fan across the peripheral card so as to cool the peripheral card.

21. The electronic device housing of claim 19 further comprising a third portion configured to support a sensor for determining whether the contoured portion has been removed.

22. The electronic device housing of claim 21 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the panel has been removed, and wherein the contoured portion further comprises a reflective tab configured to reflect the beam of light back to the optical sensor.

23. The electronic device housing of claim 19 wherein the contoured portion is transparent.

24. A computer, comprising:

a housing divided into a plurality of discrete thermal zones, each thermal zone compartmentalizing a heat producing element;

a fan disposed inside each of the thermal zones and configured to force air over the heat producing element;

a removable duct door having one or more contoured portions, the contoured portions protruding into at least one thermal zone so as to force air over the heat producing element located therein.

25. The computer of claim 24 further comprising a sensor configured to determine whether the duct door is placed proximate to the housing.

26. The computer of claim 25 wherein the sensor is an optical sensor configured to emit a beam of light and to detect a reflection of the beam of light so as to determine whether the duct door is placed proximate to the housing, and wherein the duct door further comprises a reflective tab configured to reflect the beam of light back to the optical sensor.

27. The computer of claim 25 wherein the heat producing element is a microprocessor configured to transmit a warning message to a user of the computer upon a determination by the sensor that the duct door is not placed proximate to the housing.

28. The computer of claim 25 wherein the heat producing element is a microprocessor configured to shut down upon a determination by the sensor that the duct door is not placed proximate to the housing.

29. The computer of claim 25 wherein the heat producing element is a microprocessor configurable in a first mode so as to consume a first amount of electrical power and a second mode so as to consume a second amount of electrical power, the first amount greater than the second amount, and wherein the microprocessor is further configurable to transition from the first mode to the second mode upon a determination by the sensor that the duct door is not placed proximate to the housing.

30. The computer of claim 25 wherein the fan is configured to operate at a first speed and a second speed, the second speed greater than the first speed, and wherein the fan is further configured to transition from the first speed to the second speed upon a determination by the sensor that the duct door is not placed proximate to the housing.

31. The computer of claim 24 further comprising a first heat producing element and a second heat producing element, and first and second fans, the duct door further having first and second contoured portions, the first contoured portion configured to direct a first flow of air from the first fan across the first heat producing element, and the second contoured portion configured to direct a second flow of air from the second fan across the second heat producing element.

32. The computer of claim 24 wherein the duct door is transparent.